AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning at page 3, line 5, as follows:

Thus, it is necessary to take measure to further increase an inductance value of the reactor 201 for improving the power factor in order to clear the IEC standard at the time of especially high loading, and it causes the inverter to increase in size and weight, which increases ~~in~~ cost.

Please amend the paragraph beginning at page 5, line 22, as follows:

The inverter controller further includes: a motor voltage command generator which generates a motor voltage command value of the motor, based on a speed command value of the motor applied from the outside; a positive neutral (PN) ~~PN~~ voltage detector which detects a DC voltage value of the inverter; a PN voltage corrector which calculates a ratio of the DC voltage detection value of the inverter obtained by the PN voltage detector to a predetermined DC voltage reference value of the inverter to thereby generate a PN voltage correction factor; a first motor voltage command corrector which performs voltage correction of the motor voltage command value by multiplying the motor voltage command value obtained by the motor voltage command generator by a PN voltage correction factor which is an output value of the PN voltage corrector to thereby produce a motor voltage command correction value; a motor current detector which detects a motor current of the motor; a beat amount corrector which calculates a fluctuation amount of the motor current from the motor current detection value obtained by the motor current detector and generates a reverse phase component of the motor current fluctuation amount, and a second motor voltage command corrector which performs voltage correction of the motor voltage command correction value by multiplying the motor voltage command correction value obtained by the first motor voltage command corrector, by an output value of

the beat amount corrector, and generates a voltage command value to be applied to the motor.

Please amend the paragraph beginning at page 6, line 19, as follows:

According to this constitution, a small, light and low-cost inverter controller for driving the motor can be implemented by using the small-capacity reactor and the small-capacity capacitor. As a result, even when it is difficult or impossible to drive the motor because the inverter DC voltage largely fluctuates, the motor can be kept driving by keeping the voltage applied to the motor constant by the PN voltage correcting means. The ~~and the further~~ small, light and low-cost inverter controller for driving the motor can be further provided by suppressing the fluctuation amount of the motor current by the beat amount correcting means to reduce loss and current capacity of the element.

Please amend the paragraph beginning at page 10, line 2, as follows:

Still further preferably, the fundamental wave current detector converts the motor current detection value from the three-phase AC to the two-phase DC, performs the first-order delay calculation thereof, and further converts ~~converting~~ the resultant value from the two-phase DC to the three-phase AC, thereby obtaining the motor current fundamental wave component.

Please amend the paragraph beginning at page 11, line 23, as follows:

According to this constitution, the cost of the motor current detecting means can be a requisite minimum as compared with the case in which a current sensor is used.

Please amend the paragraph beginning at page 13, line 23, as follows:

Fig. 20 is a block diagram showing a system constitution of a prior art ~~general~~ inverter controller for driving an induction motor;

Please amend the paragraph beginning at page 13, line 25, as follows:

Fig. 21 is a graph view showing an example of a prior art ~~general~~ V/F control pattern;

Please amend the paragraph beginning at page 14, line 2, as follows:

Fig. 22 is a diagrammatic view showing a relation between a harmonic component of an AC power supply current and an order to the AC power supply frequency in the prior art inverter controller shown in Fig. 20; and

Please amend the paragraph beginning at page 14, line 5, as follows:

Fig. 23 is a circuit diagram showing a prior art ~~conventional~~ DC power supply apparatus.

Please amend the paragraph beginning at page 22, line 21, as follows:

Still further, according to the inverter controller for driving the induction motor of the present invention, the combination of the small-capacity reactor and the small-capacity capacitor is preferably decided so that the resonant frequency between the small-capacity reactor and the small-capacity capacitor may be larger than ~~the~~ forty-fold of the AC power supply frequency. Thus, the harmonic component of the AC power supply current can be prevented and the IEC standard can be satisfied.

Please amend the paragraph beginning at page 23, line 19, as follows:

As described above, in the inverter controller according to the present embodiment, since each of the phase voltage command values is corrected using the PN voltage correction factor, almost constant motor voltage can be applied even when the PN voltage fluctuates. Thus, a large-capacity capacitor becomes unnecessary and therefore a small-capacity capacitor can be used. By using such a small-capacity capacitor, the input current can ~~be~~ always be applied to the motor and the power factor of the input current can be increased, so that the reactor can be reduced in size. Thus, by using the small-capacity reactor and the small-capacity capacitor, there can be attained a small, light and low-cost inverter controller for driving an induction motor. As a result, even when it is difficult or impossible to drive the induction motor because the inverter DC voltage largely fluctuates, the induction motor can be kept driving by operating the inverter so that the voltage applied to the induction motor remains almost constant.

Please amend the paragraph beginning at page 24, line 12, as follows:

In addition, it is noted here that[[,]] the present invention is not limited to the inverter controller for driving the induction motor by the V/F control as described in the above embodiment, but can be applied to an inverter controller for driving an induction motor by a well-known vector control method.

Please amend the paragraph beginning at page 38, line 17, as follows:

Fig. 17 shows a first operation explanatory view of the current detecting means of the present invention. Referring to Fig. 17, since an inverter bus line current is not a continuous value in a time axis (lateral axis) like the motor current, ~~and~~ it is discrete value every carrier

frequency of the inverter. That is, since a positive current flows in the inverter when the inverter is energized, it varies like a pulse as shown in Fig. 17. Therefore, it is necessary to detect the inverter bus current in synchronization with the carrier frequency, in the inverter bus current detector 13 which is implemented by the shunt resistance previously provided in order to protect the inverter from overcurrent thereof.

Please amend the paragraph beginning at page 40, line 18, as follows:

As described above, according to the present invention, a small, light and low-cost inverter controller for driving the motor can be implemented by using the small-capacity reactor and the small-capacity capacitor. As a result, even when it is difficult or impossible to drive the motor because the inverter DC voltage largely fluctuates, the motor can be kept driving by keeping the voltage applied to the motor constant by the PN voltage correcting means. The ~~and the further~~ small, light and low-cost inverter controller for driving the motor can further be provided by suppressing the fluctuation amount of the motor current by the beat amount correcting means to reduce loss and current capacity of the element.